

Name: _____

at1110paper_practice_test (v111)

1. Expand the following expression into standard form.

$$(7x - 4)(5x - 8)$$

$$35x^2 - 56x - 20x + 32$$

$$35x^2 - 76x + 32$$

2. Solve the equation.

$$7x^2 + 37x + 67 = 4x^2 + 2x - 5$$

$$3x^2 + 35x + 72 = 0$$

$$(3x + 8)(x + 9) = 0$$

$$x = \frac{-8}{3} \quad x = -9$$

3. Expand the following expression into standard form.

$$(5x - 9)^2$$

$$25x^2 - 45x - 45x + 81$$

$$25x^2 - 90x + 81$$

4. Solve the equation with factoring by grouping.

$$15x^2 - 10x - 18x + 12 = 0$$

$$(5x - 6)(3x - 2) = 0$$

$$x = \frac{6}{5} \quad x = \frac{2}{3}$$

5. Factor the expression.

$$x^2 - x - 6$$

$$(x + 2)(x - 3)$$

6. Solve the equation.

$$(4x - 5)(3x + 2) = 0$$

$$x = \frac{5}{4} \quad x = \frac{-2}{3}$$

7. Expand the following expression into standard form.

$$(8x - 7)(8x + 7)$$

$$\begin{aligned} & 64x^2 + 56x - 56x - 49 \\ & 64x^2 - 49 \end{aligned}$$

8. Factor the expression.

$$36x^2 - 25$$

$$(6x - 5)(6x + 5)$$